



Prof. Dr.Eng. Nasrullah, S.Si., M.T.,

Position	Physics; Calculus Physics; Optics; Electromagnetics; Laser; Spectroscopy; Laser Spectroscopy; Atom Optics; Sensor and Transducer;
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Academic Career	<p>Doctorate Course: Doctor of Engineering (D. Eng.) in Fiber Amenity Engineering, University of Fukui, Fukui, Japan</p> <p>Magister Course: Master Degree of Engineering (M. Eng.) in Optoelectrotechniques and Laser Applications from University of Indonesia, Jakarta, Indonesia</p> <p>Bachelor Course: Physics (Universitas Syiah Kuala)</p>
Employment	<ol style="list-style-type: none"> 1. Oktober 2005 – September 2007 – Postdoctoral fellows of Japanese Government through Japan Society for the Promotion of Science (JSPS) at University of Fukui, Japan. 2. October 2008 till December 2009 -postdoctoral fellows of Training and Research in Italian Laboratories (TRIL) program at ENEA Frascati Research Centre, Roma, Italy, jointly funded between international centre for the theoretical physics (ICTP), Trieste, Italy, united nations for education, scientific and cultural organization (UNESCO) and international atomic energy association (IAEA) and Italian National Agency for New Technologies, Energy and the Environment (ENEA), Italy 3. Secretary of the Department of Physics (2011-2015) 4. Chairman of the Department of Physics (2015-2019) at Faculty of Mathematics and Natural Sciences, Syiah Kuala University, Aceh, Indonesia. 5. Executive Secretary of Physical Society of Indonesia (PSI), Aceh's chapter (2011-2014) 6. Chairman of PSI, Aceh's chapter (2014-2017) 7. He serves academic community as reviewer for several reputable international and national journals 8. Executive Secretary of Japan University Alumni Association in Indonesia (PERSADA), Aceh's chapter (2014-2017) 9. Chairman of PERSADA, Aceh's chapter (2018-2021)
Research and development projects (last 5 years)	<ol style="list-style-type: none"> 1. Geochemical and Mineralogical Quantitation of Volcanic Soils in Indonesia Using Laser Plasma Spectroscopy, X-ray Fluorescence Spectroscopy, Infrared Spectroscopy, and Inductively Coupled Plasma Spectroscopy Methods/ Indonesian Collaboration Research-PTNBH/IDR250,000,000/2024 2. Authentication of Organic Eggs Using Laser Induced Breakdown Spectroscopy (LIBS) Spectrum of Eggshells Assited by Artificial Neural Networks/Professor research Grant-USK PTNBH/IDR148,000,000/2023-2024 3. Geochemical Study of Paleotsunami Sediment Layers in Aceh Using Laser Induced Breakdown Spectroscopy (LIBS) Technique/Masters Education Towards Doctorate for Excellent Graduates (PMDSU)/IDR184,000,000/2020-2022 4. Simplified Laser Induced Breakdown Spectroscopy (LIBS) For Environmental and Geological Sample Analysis In Developing Countries/IDR480,200,000/2019-2021
Collaborations (last 5 years)	<ol style="list-style-type: none"> 1. Geochemical and Mineralogical Quantitation of Volcanic Soils in Indonesia Using Spectroscopy Methods/ Research Collaboration of 3 Indonesian Universities (Syiah Kuala University, Diponegoro University, Andalas University)-PTNBH/2024 2. Analysis of tsunami sediment deposits using TEA CO2 laser induced breakdown spectroscopy/University of Fukui, Japan 3. Geochemical study of tsunami sediment deposits using UV laser induced breakdown spectroscopy/King Fadh University of Petroleum and Mineral, Saudi Arabia 4. Calibration free Laser Induced Breakdown Spectroscopy (LIBS) for profiling chemical component in Aceh tsunami sediment deposits/Mirpur University of Science and Technology, Pakistan
Patents and proprietary rights	Books: Nasrullah Idris , 2022, <i>Spektroskopi Plasma Laser Prinsip dan Aplikasi</i> , Banda Aceh, Syiah Kuala University Press, 9786232646551; 9786232646582 (PDF).
Selective Publications (last 5 years)	<ol style="list-style-type: none"> 1. Khumaeni, A., Indriana, R. W., Jonathan, F., Fiantis, D., Ginting, F. I., Idris, N., Kurniawan, H. (2025, December). Analysis of geochemical and mineral compositions of volcanic soil affected by Merapi eruption in Central Java Indonesia using laser-induced breakdown spectroscopy with calibration-free. In <i>Talanta</i> (Vol. 295, pp. 128376). Elsevier. 2. Mitaphonna, R., Idris, N., Ramli, M., Ismail, N., Kurihara, K., & Lahna, K. (2024, July). A pulsed carbon dioxide laser-induced breakdown analysis for chemical profile of tsunami-affected soil. <i>Global Journal of Environmental Science and Management</i>, 10(3), 1211-1226. 3. Mitaphonna, R., Ramli, M., Ismail, N., Idris, N., (2024, June). Qualitative Geochemical Analysis of the 2004 Indian Ocean Giant Tsunami Deposits Excavated at Seungko Mulat Located in Aceh Besar of Indonesia Using Laser-Induced Breakdown Spectroscopy. In <i>Indonesian Journal of Chemistry</i> (Vol. 24, No. 3, p. 755-775). Chemistry Department Universitas Gadjah Mada. 4. Mitaphonna, R., Ramli, M., Ismail, N., & Idris, N. (2023, February). Evaluation of geochemical signature in soil sampled from a 2004 Indian Ocean Tsunami-stricken region in Aceh Province located in the Western part of Indonesia using scanning electron microscopy-energy dispersive X-ray (SEM-EDX) spectroscopy and its compatibility with X-ray fluorescence (XRF) measurement. In <i>Philippine Journal of Science</i> (Vol. 152, No. 1, p. 485-499). Department of Science and Technology, Philippines.
Membership	<ol style="list-style-type: none"> 1. Physical Society of Indonesia (PSI), 2007 to date
External Link	https://fsd.usk.ac.id/nasrullahidris/